

**Appendix E**  
**Field Sampling Checklist**

## Field Sampling Event Data QC Checklist

Event Name: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Field Manager: \_\_\_\_\_

Samplers: \_\_\_\_\_

Packers: \_\_\_\_\_

Data Tech: \_\_\_\_\_

Planned Start Date (A): \_\_\_\_\_

Field Completion Date (B): \_\_\_\_\_

Final Lab Report Received (C): \_\_\_\_\_

Final Validated Data (D): \_\_\_\_\_

PRE-EVENT PLANNING MEETING	Responsibility	Scheduled Due Date	Scheduled Due Date	Completed Date	Completed By
<input type="checkbox"/> Schedule meeting with relevant staff	Proj Mgr	A-14			
<input type="checkbox"/> Identify document that defines project/event/task scope of work	Proj Mgr	A-14			
<input type="checkbox"/> Identify and discuss specific requirements -field sampling methods -analytes -schedule -communication	Proj Mgr and all staff	A-14			

PRE-EVENT PLANNING	Responsibility	Scheduled Due Date	Scheduled Due Date	Completed Date	Completed By
<input checked="" type="checkbox"/> Determine COC starting number and series (e.g. YERW or YER )	Data Tech	A-14			
<input checked="" type="checkbox"/> Prepare COC template	Data Tech	A-14			
<input checked="" type="checkbox"/> Prepare label template	Data Tech	A-14			
<input checked="" type="checkbox"/> Database preparation -Create new location/sample names (if required) -Create new analyte list (if required) -Create database COC	Data Tech	A-14			
<input checked="" type="checkbox"/> Order lab grade water for QC samples --2 L/QC sample (Irvine) --8 L/QC sample (Richland)	Data Tech	A-14			
<input checked="" type="checkbox"/> Order sample containers, coolers, temp blanks, custody seals from labs	Data Tech	A-14			
<input checked="" type="checkbox"/> Order calibration and field supplies	Data Tech	A-14			
<input checked="" type="checkbox"/> Pre-assign QC sample names & locations (where possible)	Data Tech	A-14			
<input type="checkbox"/> Send homeowner notification letters	Data Tech	A-10			
<input checked="" type="checkbox"/> QC review of COCs to ensure complete and accurate -Top section completely filled in -Event Name defined -Analyte list complete and accurate -Samples filtered (Y/N) -Verify correct lab for the specified parameters	Field Mgr	A-7			
<input checked="" type="checkbox"/> QC review of labels to ensure complete and accurate -Analyte list complete and accurate -Preservative filtered	Field Mgr	A-7			
<input type="checkbox"/> Print final COCs and labels and organize for field use	Data Tech	A-7			

IN-FIELD ACTIVITIES	Responsibility	Scheduled Due Date	Scheduled Due Date	Completed Date	Completed By
<b>COCs</b>					
<input type="checkbox"/> Field QC Review of the following COC items:	Field Mgr	B			
<input checked="" type="checkbox"/> Fill out at time of sample collection (full date, sampler name, time)	Sampler	on-going	on-going		
<input checked="" type="checkbox"/> Initial/date all revisions	Sampler	on-going	on-going		
<input checked="" type="checkbox"/> Sign relinquishment section when samples given to someone else	Sampler	on-going	on-going		
<input checked="" type="checkbox"/> Place completed COC in designated area with samples (e.g. in fridge, basket)	Sampler	on-going	on-going		
<input checked="" type="checkbox"/> Fill in other sections prior to shipping (signature when received, date shipped, shipping method, tracking #)	Packer	on-going	on-going		
<input checked="" type="checkbox"/> Assign COC# if not pre-assigned, keep track of which COC #s used	Packer	on-going	on-going		
<input checked="" type="checkbox"/> Assign Level IV data request (as needed)	Field Mgr/Packer	on-going	on-going		
<input checked="" type="checkbox"/> Make copy of completed COC on yellow paper and save for project file	Packer	on-going	on-going		
<input checked="" type="checkbox"/> Place original COC in plastic sleeve in cooler with samples for shipment	Packer	on-going	on-going		
<b>Labels</b>					
<input type="checkbox"/> Field QC Review of the following Label items:	Field Mgr	B			
<input type="checkbox"/> Write sample name, date, time, sampler initials on all labels	Sampler	on-going	on-going		
<input type="checkbox"/> Labels on bottles prior to filling or immediately after, no delays	Sampler	on-going	on-going		
<input type="checkbox"/> Clear packing tape placed over non-waterproof labels	Sampler	on-going	on-going		
<b>Field Forms</b>					
<input type="checkbox"/> Field QC Review of the following Field Form items:	Field Mgr	B			
<input type="checkbox"/> Fill in completely, use proper document control (single line cross-out, initial, date)	Sampler	on-going	on-going		
<input type="checkbox"/> Time of sample collection on COC/labels should match time of last recorded field parameter (if similar)	Sampler	on-going	on-going		
<input type="checkbox"/> Store completed Field Forms in secure location until end of project	Field Mgr	on-going	on-going		
<b>Calibration Forms</b>					
<input type="checkbox"/> Field QC Review of the following Calibration Form items:	Field Mgr	B			
<input type="checkbox"/> Fill in completely, identify which field team is using equipment each day	Sampler	on-going	on-going		
<input type="checkbox"/> Document any maintenance done on field equipment	Sampler	on-going	on-going		
<b>Field Log Books</b>					
<input type="checkbox"/> Field QC Review of the following Field Log Book items:	Field Mgr	B			
<input type="checkbox"/> Keep records of daily activities, wells visited, samples collected, QC samples collected, general observations, problems, decisions, site visitors (e.g., EPA, auditors), etc	Sampler	on-going	on-going		
<input type="checkbox"/> Use proper document control (no blank lines, single-line cross-out, initial & date, date at top of each page, initials at bottom of each page, last page has single line drawn to bottom with signature and date)	Sampler	on-going	on-going		
<input type="checkbox"/> Make copies of field books --bi-weekly for long-term events	Field Mgr	bi-weekly	bi-weekly		
<b>QC Samples</b>					
<input type="checkbox"/> Field QC Review to ensure the following QC samples are completed as required:	Field Mgr	B			
<input type="checkbox"/> Duplicates: 1/10, usually pre-assigned to specific locations	Field Mgr	on-going	on-going		
<input type="checkbox"/> MS/MSD: 1/20, evenly spaced frequency every 2 <sup>nd</sup> sample collected, can be pre-assigned	Field Mgr	on-going	on-going		
<input type="checkbox"/> Field Blank: 1/20, evenly spaced frequency every 2 <sup>nd</sup> sample collected, use lab grade water (diff water for each lab), collect at field sample location, filter with peristaltic pump; also used as filter blank.	Field Mgr	on-going	on-going		
<input type="checkbox"/> Equipment Blank: Daily for each reusable equip used, lab grade water, filtered	Field Mgr	on-going	on-going		
<b>Sample Shipment</b>					
<input type="checkbox"/> Field QC Review of the following Sample Shipment items:	Field Mgr	B			

## Field Sampling Event Data QC Checklist

Event Name: \_\_\_\_\_

<input type="checkbox"/> frequency? as specified by Proj Mgr? Other? Approach for NO3 to optimize data quality?	Packer	on-going	on-going		
<input type="checkbox"/> Other specifics? Confirm compliance with DOT regulations?	Packer	on-going	on-going		
<input type="checkbox"/> cross-check sample containers against COCs?	Packer	on-going	on-going		
<input type="checkbox"/> place COCs in cooler?	Packer	on-going	on-going		

POST-COMPLETION	Responsibility	Scheduled Due Date	Scheduled Due Date	Completed Date	Completed By
<b>Field Forms (within 1 week of event end date)</b>					
<input type="checkbox"/> Final QC review of Field Forms	Proj/Field Mgr	B+7			
<input type="checkbox"/> Hand enter field data in database & assign event name	Data Tech	B+7			
<input type="checkbox"/> QC review of database entries	Field Mgr	B+7			
<input type="checkbox"/> Scan and save forms as PDF in "Field Forms" folder	Data Tech	B+7			
<input type="checkbox"/> File originals in project folder	Data Tech	B+7			
<b>Calibration Forms (within 1 week of event end date)</b>					
<input type="checkbox"/> Scan and save forms as PDF in "Field Forms" folder	Data Tech	B+7			
<input type="checkbox"/> File originals in project folder	Data Tech	B+7			
<b>Field Log Books (within 1 week of event end date)</b>					
<input type="checkbox"/> Final QC review for completeness, properly labeled, signed and dated pages	Field Mgr	B+7			
<input type="checkbox"/> Scan and save forms as PDF in "Field Books" folder	Data Tech	B+7			
<input type="checkbox"/> File originals in project folder	Data Tech	B+7			
<b>COCs (within 1 week of event end date)</b>					
<input type="checkbox"/> Hand enter sample date and time in database	Data Tech	B+7			
<input type="checkbox"/> QC review of database entries	Field Mgr	B+7			
<input type="checkbox"/> File originals in project folder	Data Tech	B+7			
<b>Sample Tracking/QC Sample Assignment (within 1 week of event end date)</b>					
<input type="checkbox"/> Receive emailed SDG sample receipts from labs and save to "Sample Receipts" folder	Tech/Field Mgr	B+7			
<input type="checkbox"/> Confirm all sample receipts received, cross-check with copies of COCs sent	Data Tech	B+7			
<input type="checkbox"/> Email complete list of event SDGs to Susie Kocsis (BC) and Dina V. (ESI)	Field Mgr	B+7			
<input type="checkbox"/> Update QC Sample Summary spreadsheet with sample date, lab SDG, assign QC samples to specific field samples	Data Tech	B+7			
<input type="checkbox"/> Email QC Sample Summary spreadsheet table to Dina V. (ESI)	Field Mgr	B+7			
<input type="checkbox"/> QC check of lab sample receipts to ensure sample name, date, time match COC (within 1 week of sample receipt)	Field Mgr	B+14			
<b>Lab Reports</b>					
<input type="checkbox"/> Download lab reports from lab websites to "Lab Reports" folder	Data Tech	on-going	on-going		
<input type="checkbox"/> Download lab EDDs from lab websites to "Lab EDD" folder	Data Tech	on-going	on-going		
<input type="checkbox"/> Review lab reports for errors and request corrected lab report reissued by lab	Field Mgr	on-going	on-going		
<input type="checkbox"/> Confirm that lab EDDs have been uploaded to project database	Field Mgr	on-going	on-going		
<input type="checkbox"/> Confirm that EDD subset was downloaded and send to Dina V (ESI) for validation review	Field Mgr	on-going	on-going		
<input type="checkbox"/> Monitor progress to confirm all lab reports, including Level IV reports, issued on-tim -Irvine TAT = 2 weeks Level 2 / 4 weeks Level 4 -Richland TAT = 4 weeks Level 2 / 4 weeks Level 4	Field Mgr	B+30			
<input type="checkbox"/> Notify Proj Mgr when all lab results are complete	Field Mgr	B+30			
<input type="checkbox"/> Notify Database Mgr (Karen Cole) to run preliminary "outlier analysis" on unvalidated data and provide results to Proj Mgr (for quarterly groundwater monitoring events only)	Field Mgr	C			
<input type="checkbox"/> Notify Database Mgr (Karen Cole) to run "trend analysis" on unvalidated data and provide results to Proj Mgr (for quarterly groundwater monitoring events only)	Field Mgr	C			
<input type="checkbox"/> Save results of the preliminary "outlier" analysis on unvalidated data in the project folder	Proj Mgr	C+7			
<input type="checkbox"/> Prepare "Property Owner" data report in PDF and send to Dave Seter/EPA	Field Mgr	D+7			
<input type="checkbox"/> Combine all Basic lab reports into a single PDF file for data summary report appendix, create bookmarks for each individual lab report	Field Mgr	D+14			
<b>Verification/Validation Reports (ESI)</b>					
<input type="checkbox"/> Data verification/validation review completed; issues/questions to be addressed by Field Mgr or other appropriate personnel	ESI	on-going	on-going		
<input type="checkbox"/> Completed verification/validation reports from ESI to be saved in "Validation Report" folder	Field Mgr	on-going	on-going		
<input type="checkbox"/> Monitor progress and communicate with stakeholders	Field Mgr	on-going	on-going		
<input type="checkbox"/> Notify Proj Mgr when data validation complete	Field Mgr	D			
<input type="checkbox"/> Notify Karen Cole to run final "outlier" analysis on validated data and provide results to Proj Mgr (for quarterly groundwater monitoring events)	Field Mgr	D			
<input type="checkbox"/> Save results of the final "outlier" analysis on validated data in the project folder	Proj/Field Mgr	D+7			
<input type="checkbox"/> Notify Greg Cole validation review is complete for his final QA/QC summary of results	Field Mgr	D			
<input type="checkbox"/> Convert any Word documents to PDF for final data summary report appendix	Field Mgr	D+14			
<b>Non-Test/America Lab Results</b>					
<input type="checkbox"/> Compile results into table format and submit to Karen Cole for upload to database	Field Mgr	C+14			
<input type="checkbox"/> QC review of uploaded data with original lab reports	Field Mgr	C+21			
<input type="checkbox"/> Scan and save PDF lab reports in "Lab Report" folder	Field Mgr	C+21			

POST-EVENT DEBRIEFING	Responsibility	Scheduled Due Date	Scheduled Due Date	Completed Date	Completed By
<input type="checkbox"/> Schedule de-briefing meeting with relevant staff	Proj Mgr				
<input type="checkbox"/> Review Field Sampling Event Data QC Checklist	all				
<input type="checkbox"/> Scan and save Field Sampling Event Data QC Checklist to project folder	Proj/Field Mgr				